FIG. 1

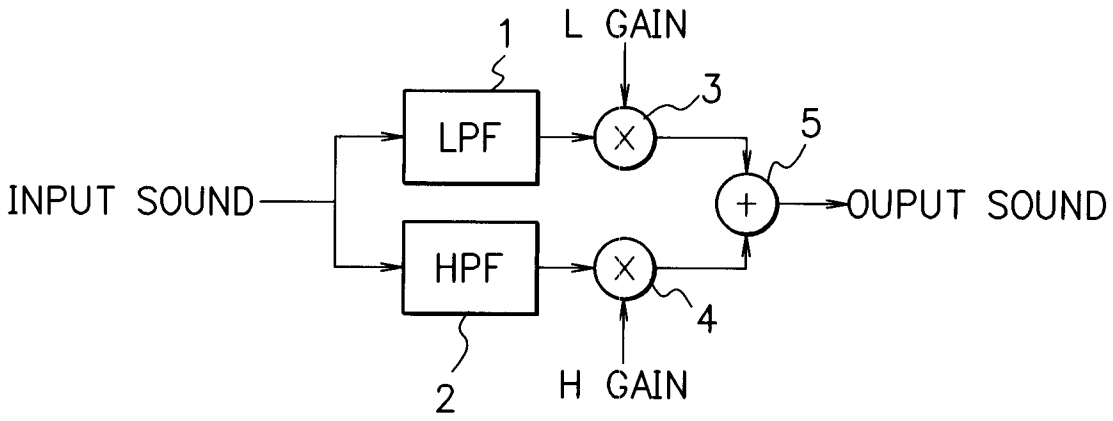


FIG. 2

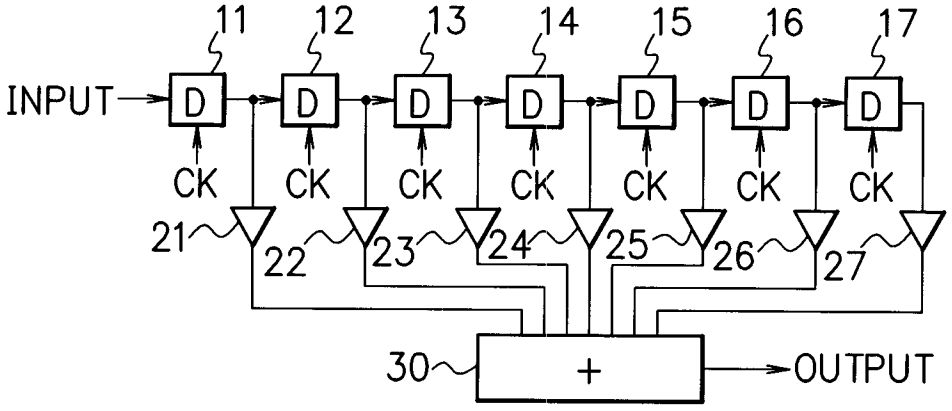


FIG. 3

[1]		[2]		[3]		[4]
−1		−1		−1		−1
3	−1	2	−1	1	−1	0
3	3	6	2	8	1	9
−1	3	2	6	8	8	16
	−1	−1	2	1	8	9
			−1	−1	1	0
					−1	−1

FIG. 4

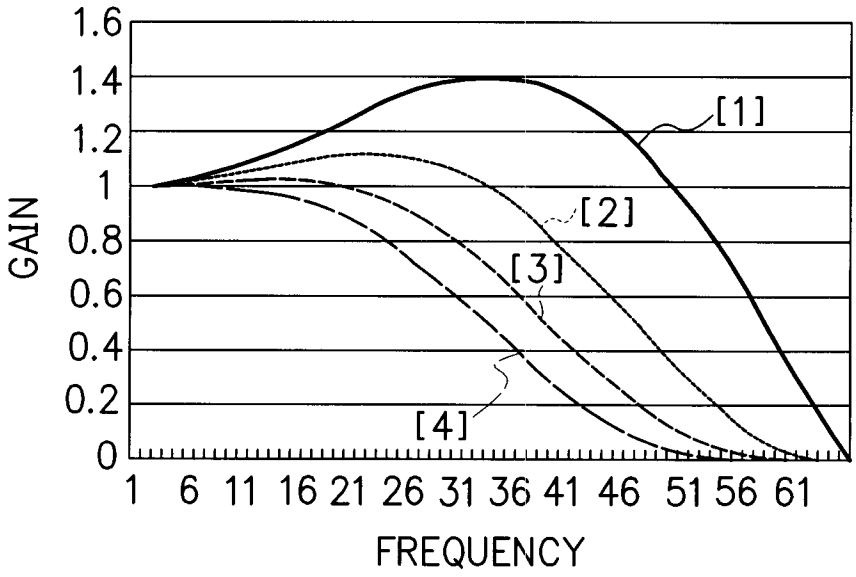

1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
GAIN
[1]
[2]
[3]
[4]
1 6 11 16 21 26 31 36 41 46 51 56 61
FREQUENCY

FIG. 5

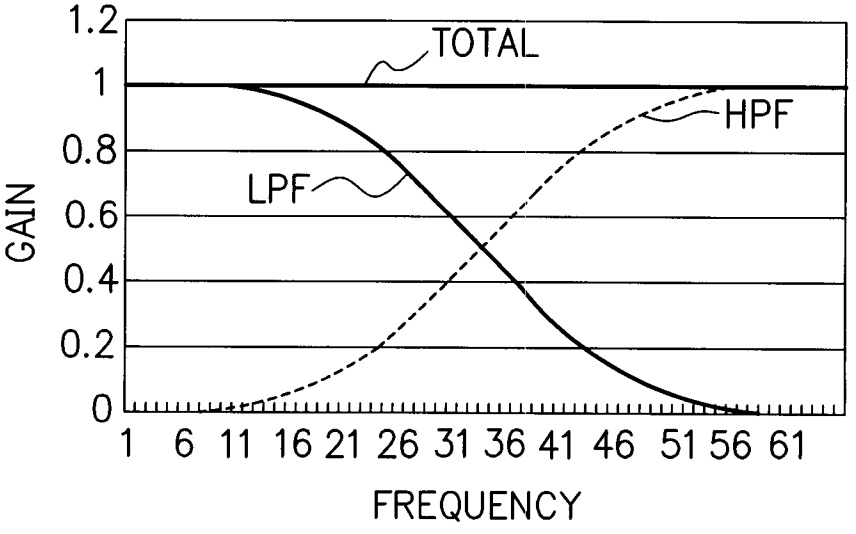
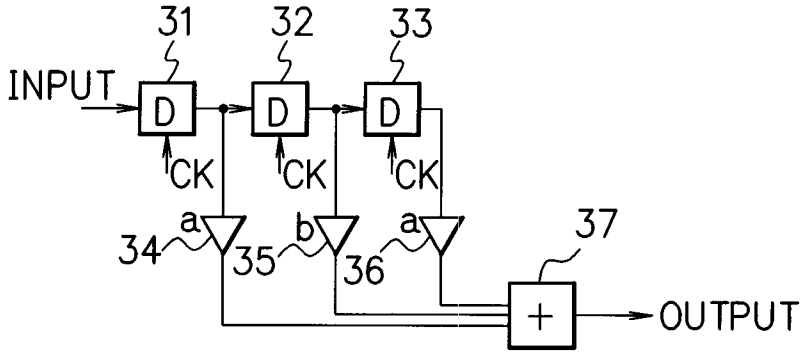
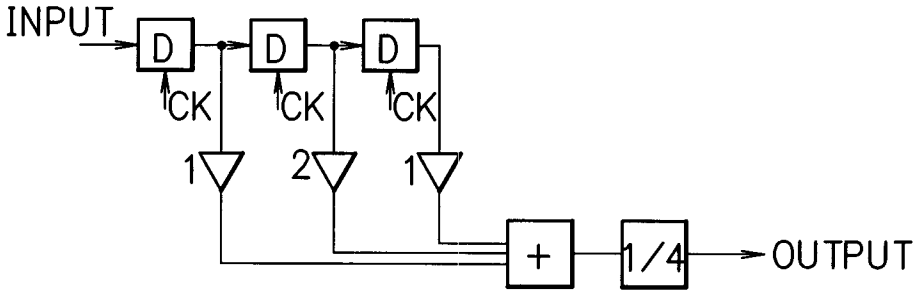

1.2
1
0.8
0.6
0.4
0.2
0
GAIN
TOTAL
HPF
LPF
1 6 11 16 21 26 31 36 41 46 51 56 61
FREQUENCY

FIG. 6A



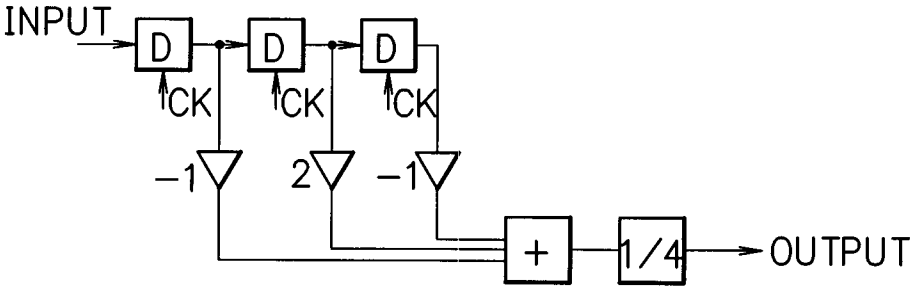
BASIC

FIG. 6B



LPF

FIG. 6C



HPF

FIG. 7A

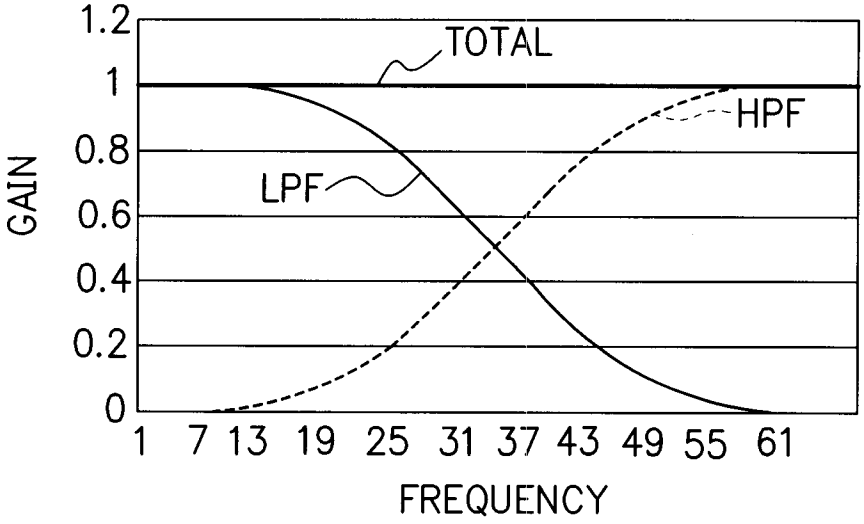

1.2
1
0.8
0.6
0.4
0.2
0
GAIN
TOTAL
HPF
LPF
1 7 13 19 25 31 37 43 49 55 61
FREQUENCY

FIG. 7B

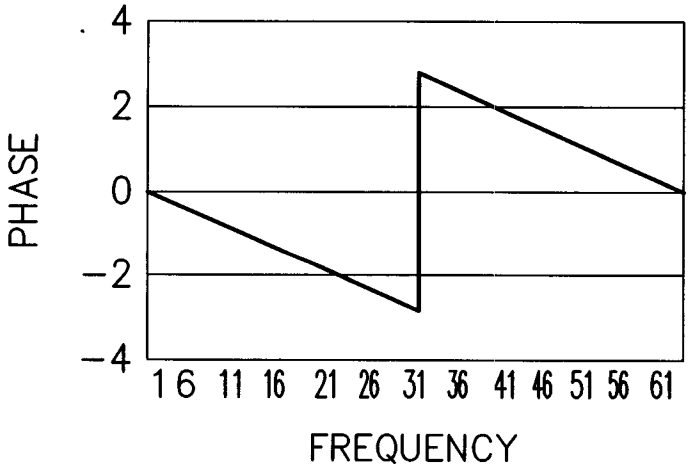

4
2
0
−2
−4
PHASE
1 6 11 16 21 26 31 36 41 46 51 56 61
FREQUENCY

FIG. 8A

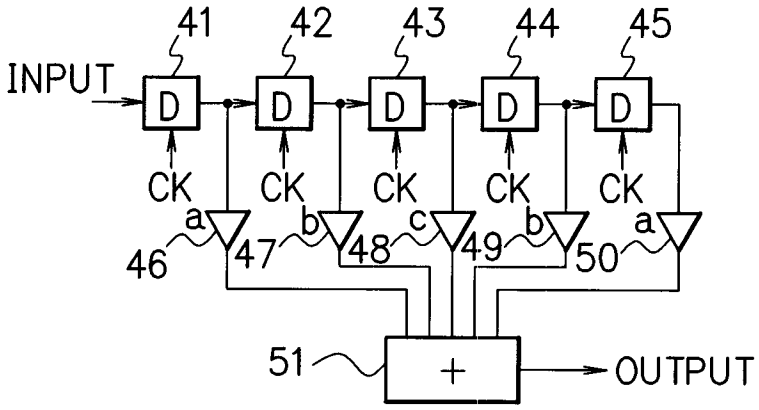


FIG. 8B

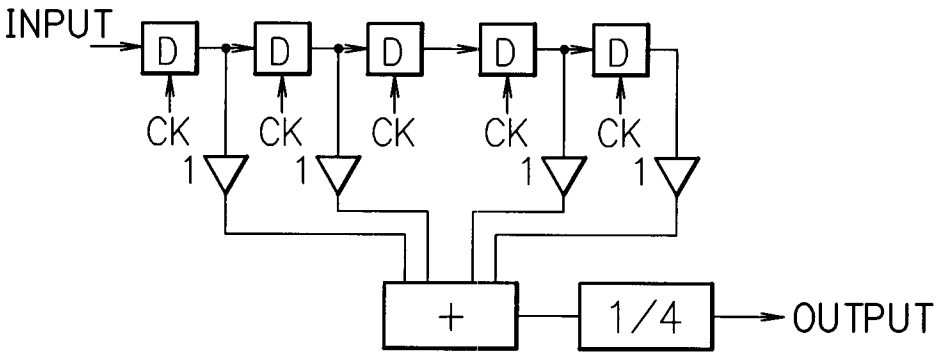


FIG. 8C

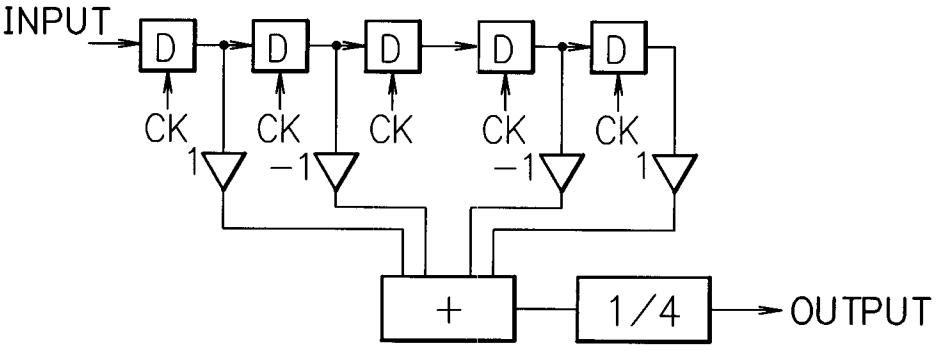


FIG. 9

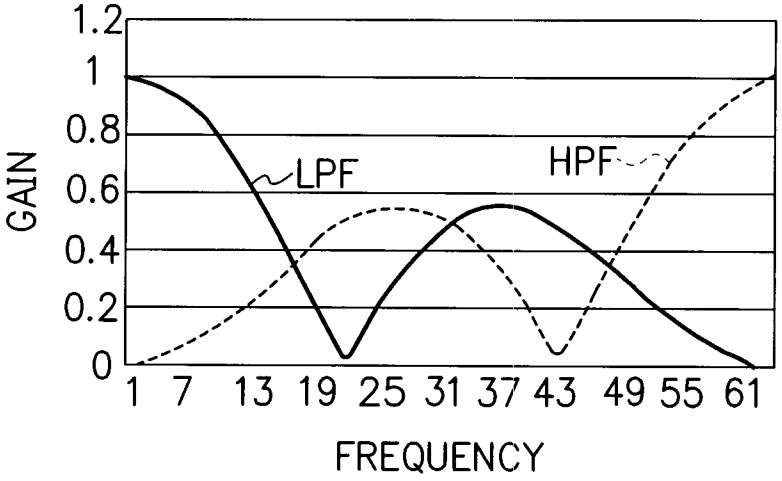

1.2
1
0.8
0.6
0.4
0.2
0
GAIN
LPF
HPF
1 7 13 19 25 31 37 43 49 55 61
FREQUENCY

FIG. 10

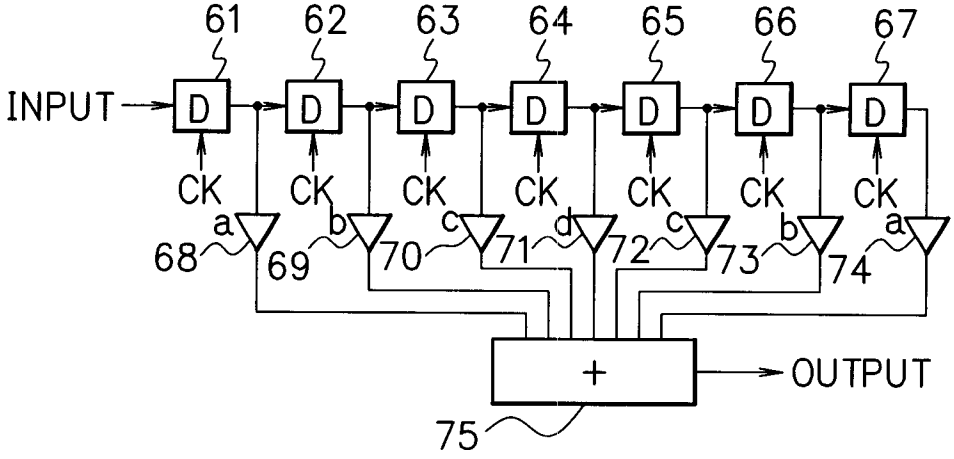

61
62
63
64
65
66
67
INPUT
D
CK
a
b
c
d
68
69
70
71
72
73
74
+
OUTPUT
75

FIG. 11

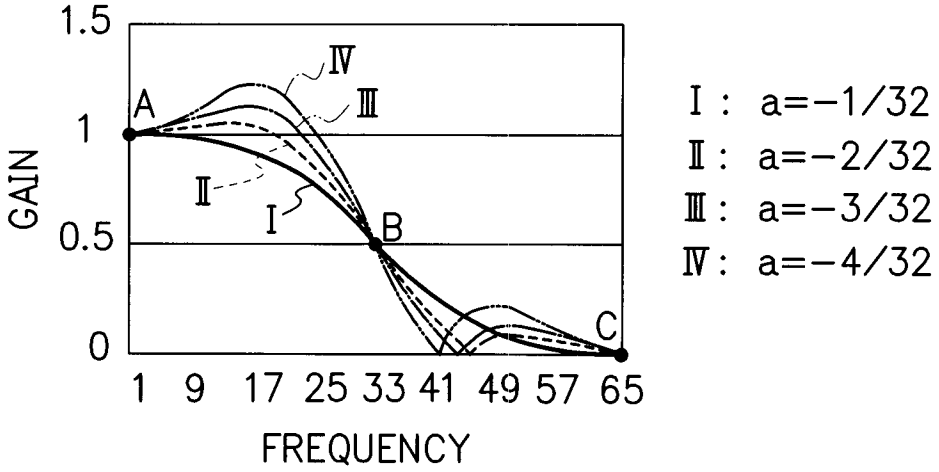


FIG. 12A

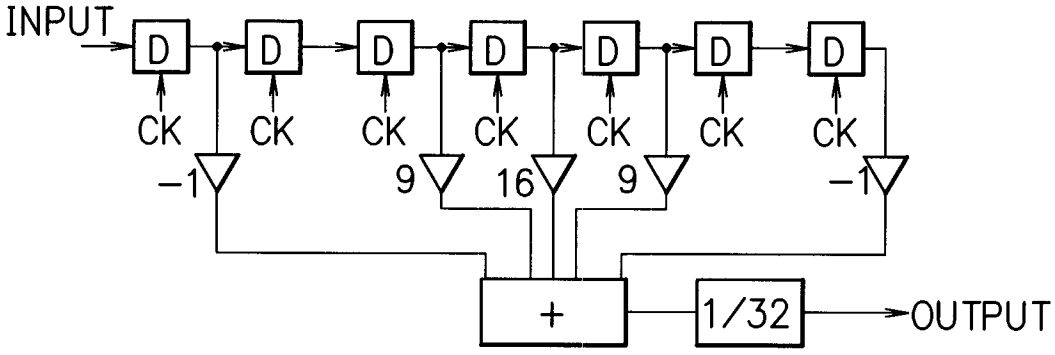


FIG. 12B

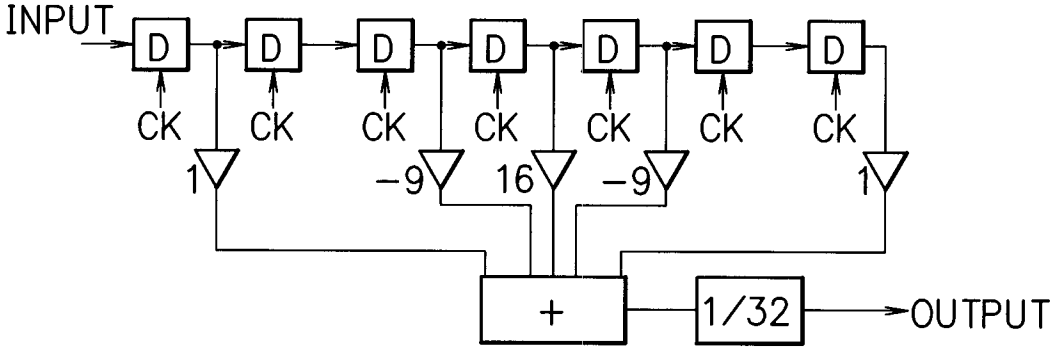


FIG. 13A

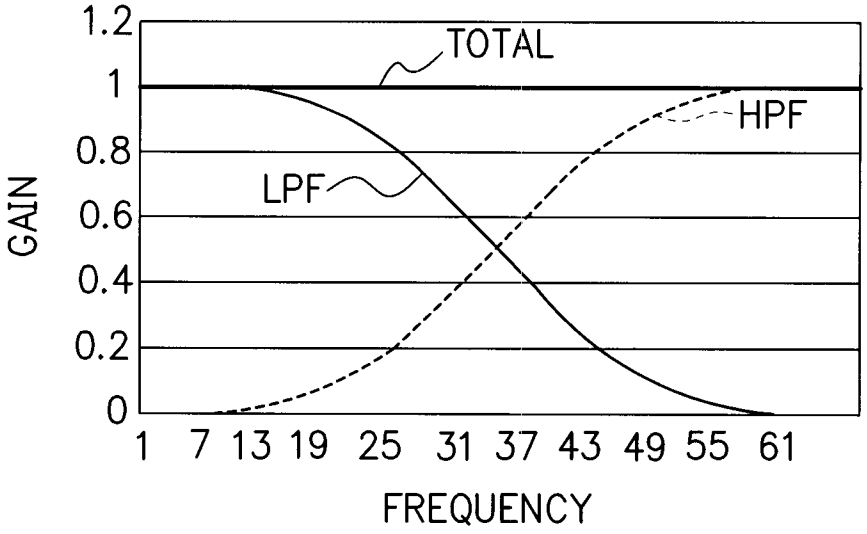


FIG. 13B

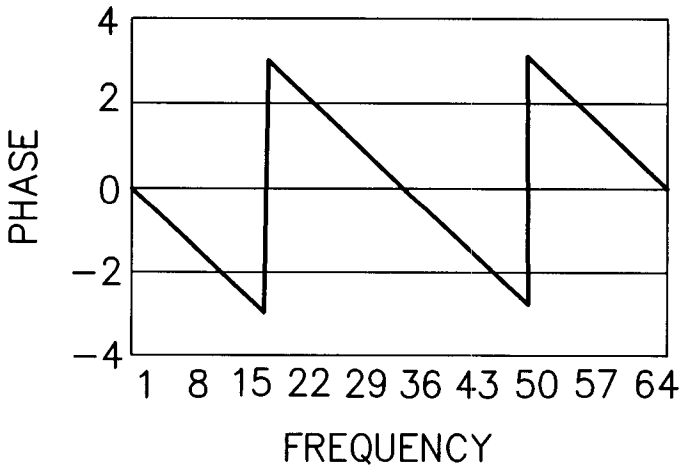


FIG. 14

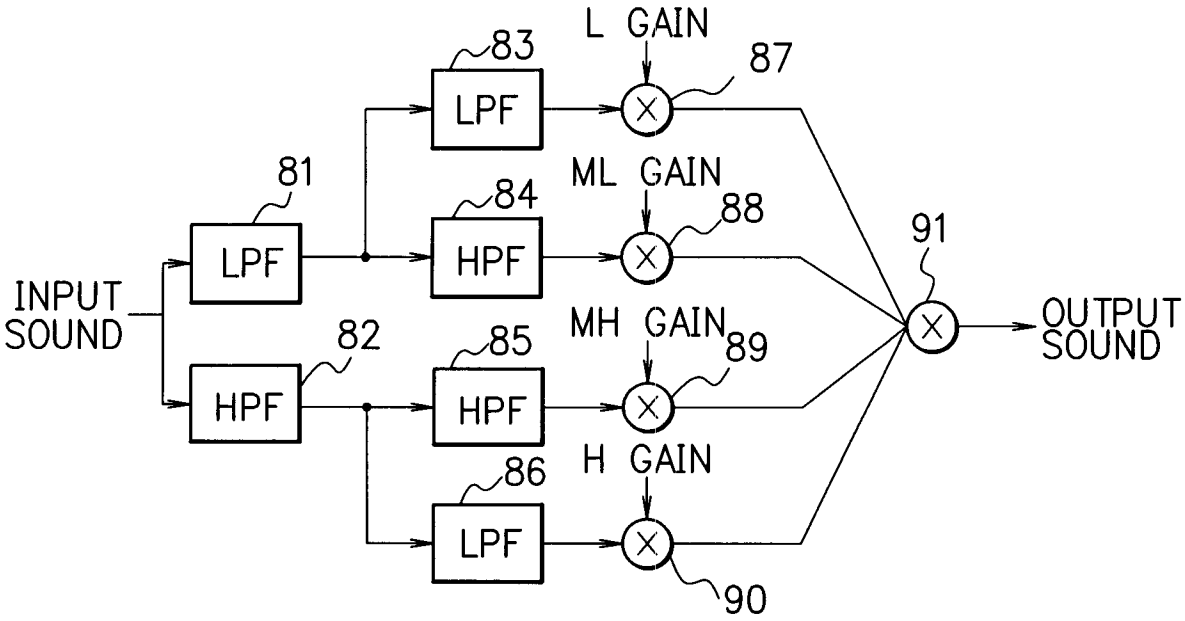


FIG. 15A

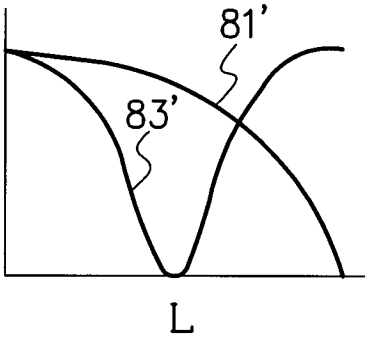


FIG. 15B

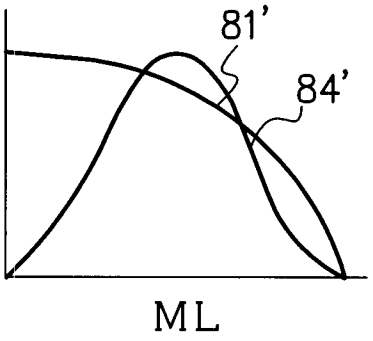


FIG. 15C

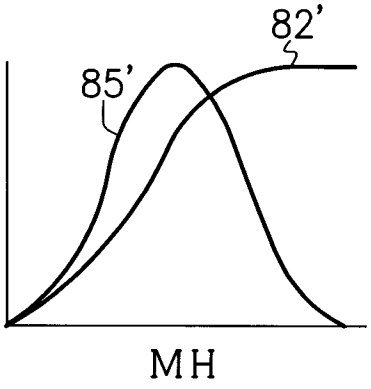
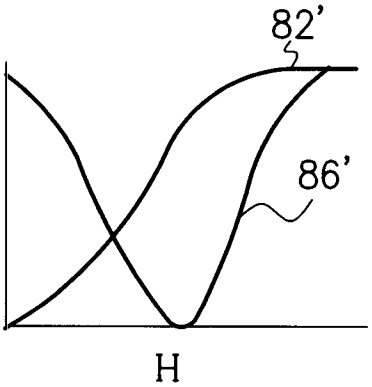
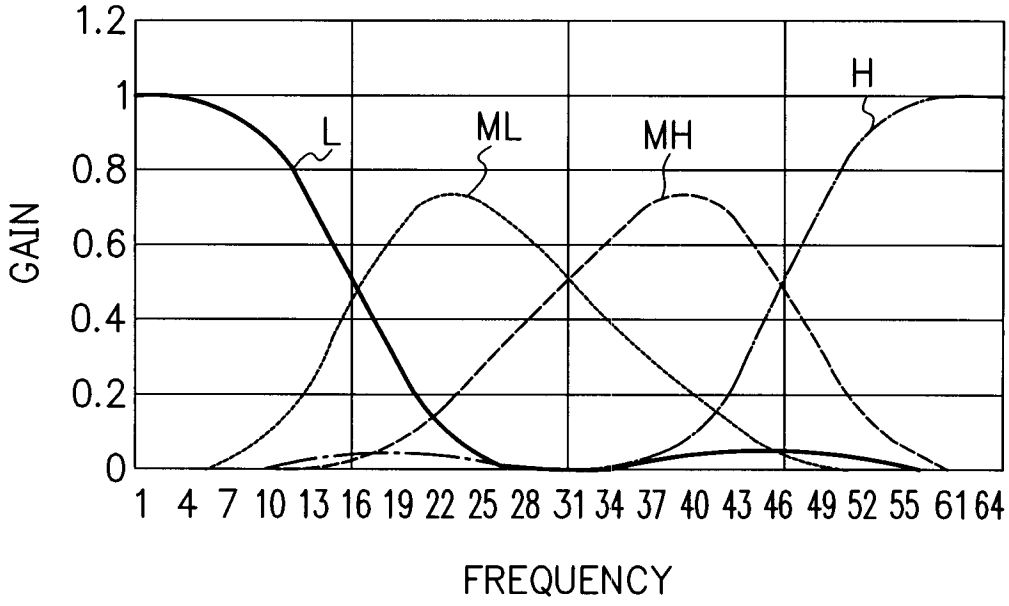


FIG. 15D



F I G. 16


1.2
1
0.8
0.6
0.4
0.2
0
GAIN
L
ML
MH
H
1 4 7 10 13 16 19 22 25 28 31 34 37 40 43 46 49 52 55 61 64
FREQUENCY

F I G. 17

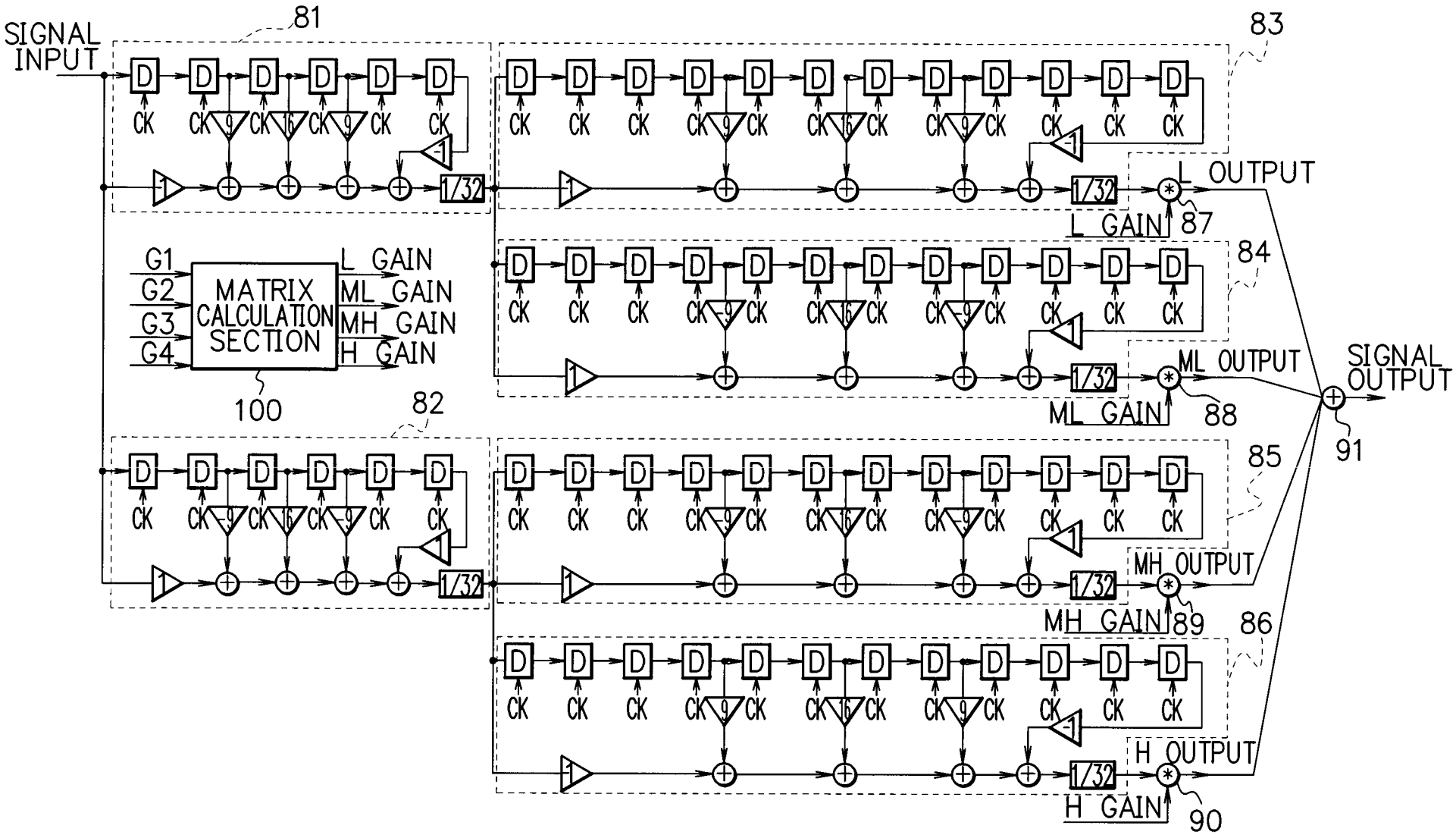

SIGNAL INPUT
81
83
84
82
85
86
D
CK
-9
16
-1
1/32
G1
G2
G3
G4
MATRIX CALCULATION SECTION
100
L GAIN
ML GAIN
MH GAIN
H GAIN
L OUTPUT
ML OUTPUT
MH OUTPUT
H OUTPUT
87
88
89
90
91
SIGNAL OUTPUT

FIG. 18

L	ML	MH	H	
0.938	0.058	0	0	
0.045	0.728	0.214	0.013	=A
0.013	0.214	0.728	0.045	
0	0	0.058	0.938	

FIG. 19

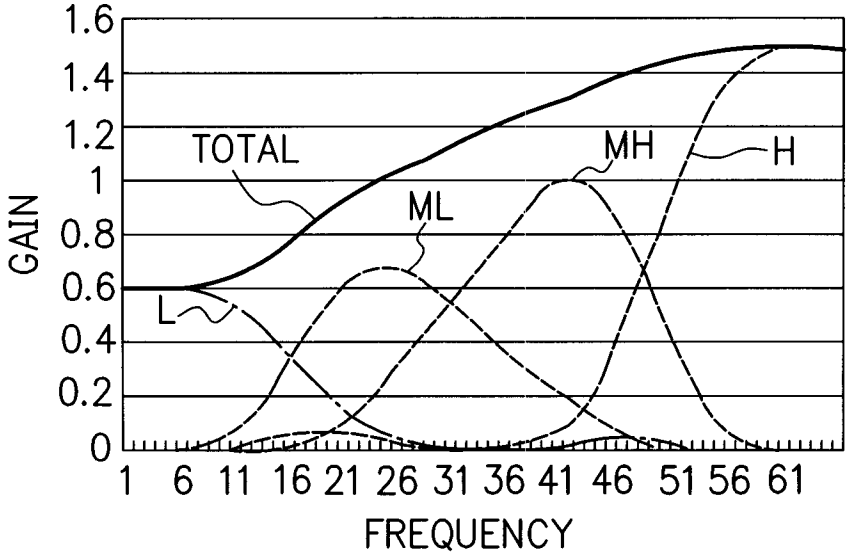
L	ML	MH	H	
0.6	0.058	0	0	
1	0.728	0.214	0.013	=B1
1.3	0.214	0.728	0.045	
1.5	0	0.058	0.938	

L	ML	MH	H	
0.938	0.6	0	0	
0.045	1	0.214	0.013	=B2
0.013	1.3	0.728	0.045	
0	1.5	0.058	0.938	

L	ML	MH	H	
0.938	0.058	0.6	0	
0.045	0.728	1	0.013	=B3
0.013	0.214	1.3	0.045	
0	0	1.5	0.938	

L	ML	MH	H	
0.938	0.058	0	0.6	
0.045	0.728	0.214	1	=B4
0.013	0.214	0.728	1.3	
0	0	0.058	1.5	

F I G. 20


1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
GAIN
TOTAL
ML
MH
H
L
1 6 11 16 21 26 31 36 41 46 51 56 61
FREQUENCY

F I G. 21A

−1				−1				−1		−1
−1	−1			−2	−1			−3	−1	−4
−1	−1	−1		−3	−2	−1		−6	−3	−9
−1	−1	−1	−1	−4	−3	−2	−1	−10	−6	−16
0	−1	−1	−1	−3	−4	−3	−2	−12	−10	−22
0	0	−1	−1	−2	−3	−4	−3	−12	−12	−24
0	0	0	−1	−1	−2	−3	−4	−10	−12	−22
0	0	0	0	0	−1	−2	−3	−6	−10	−16
9	0	0	0	9	0	−1	−2	6	−6	0
9	9	0	0	18	9	0	−1	26	6	32
9	9	9	0	27	18	9	0	54	26	80
9	9	9	9	36	27	18	9	90	54	144
16	9	9	9	43	36	27	18	124	90	214
16	16	9	9	50	43	36	27	156	124	280
16	16	16	9	57	50	43	36	186	156	342
16	16	16	16	64	57	50	43	214	186	400
9	16	16	16	57	64	57	50	228	214	442
9	9	16	16	50	57	64	57	228	228	456
9	9	9	16	43	50	57	64	214	228	442
9	9	9	9	36	43	50	57	186	214	400
0	9	9	9	27	36	43	50	156	186	342
0	0	9	9	18	27	36	43	124	156	280
0	0	0	9	9	18	27	36	90	124	214
0	0	0	0	0	9	18	27	54	90	144
−1	0	0	0	−1	0	9	18	26	54	80
−1	−1	0	0	−2	−1	0	9	6	26	32
−1	−1	−1	0	−3	−2	−1	0	−6	6	0
	−1	−1	−1	−3	−3	−2	−1	−9	−6	−15
		−1	−1	−2	−3	−3	−2	−10	−9	−19
			−1	−1	−2	−3	−3	−9	−10	−19
					−1	−2	−3	−6	−9	−15
						−1	−2	−3	−6	−9
							−1	−1	−3	−4
									−1	−1

F I G. 21B